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ABSTRACT

Online computer conferences used to assist distance learning courses often fail because the moderator-usually the instructor responsible for the conference-is not properly trained in techniques that build a community of learners. It has often been assumed that the skills required to create a vibrant classroom discussion translate easily to an online forum. This has rarely been the case. This study utilized the qualitative methods of grounded theory and narrative research to explore how a moderator, after undergoing training, would affect students in one of three segregated computer conferences supporting an online course. The training was based on both the academic literature on educational computer conference moderation and situational examples taken from the experiences of online moderators. The students' experiences with the trained moderator were compared with those students in the other two computer conferences without a trained moderator. The data analyzed were comprised of the messages collected from the three computer conferences, selected interviews, extensive journals written by the researcher, and an online survey. The study also considered the problems and pressures stemming from unclear policies for constructing an online course in an environment of overlapping departmental mandates. These mandates resulted in more emphasis being given to putting courses online than the choice of the most appropriate pedagogy. The results indicated that a trained moderator had a positive effect on computer conferences as community of support and warmth was built, while another group, without such a moderators, constructed a community based on group dissent. No community of any sort was found in the third group. (Contains 32 references.) (Author/AEF)

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The Effects Of Trained Moderation In Online Asynchronous Distance Learning

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Abstract

Online computer conferences used to assist distance learning courses often fail because the moderator—usually the instructor responsible for the conference—is not properly trained in techniques that build a community of learners. It has often been assumed that the skills required to create a vibrant classroom discussion translated easily to an online forum. This has been rarely the case.

This study utilized the qualitative methods of grounded theory and narrative research to explore how a moderator, after undergoing training, would affect students in one of three segregated computer conferences supporting an online course. The training was based on both the academic literature on educational computer conference moderation and situational examples taken from the experiences of online moderators. The students' experiences with the trained moderator were compared with those students in the other two computer conferences without a trained moderator. The data analyzed were comprised of the messages collected from the three computer conferences, selected interviews, extensive journals written by the researcher, and an online survey.

The study also considered the problems and pressures stemming from unclear policies for constructing an online course in an environment of overlapping departmental mandates. These mandates resulted in more emphasis being given to putting courses online than the choice of the most appropriate pedagogy.

The results indicated that a trained moderator had a positive effect on computer conferences as a community of support and warmth was built; while another group, without such a moderator, constructed a community based on group dissent. No community of any sort was found in the third group.

Overview of the Problem

The rush to get online can find teachers in the position of having an excellent command of classroom pedagogy but without a full complement of the skills needed to make the most of the technologies and conventions of online distance learning. It is not unusual for there to be no clear policy to educate teachers in this regard. Frequently asynchronous Internet courses contain a computer conference wherein the class can communicate with each other. A computer conference is used as an online equivalent of classroom discussion, a place where students can participate in collaborative work and carry on other activities. Historically, the moderating of such conferences have been the responsibility of the teacher or assigned to a student to manage (Murphy, Cifuentes, Yakimovicz, Segur, Mahoney, & Kodali, 1996). An incorrect but frequently made assumption is that the ability to lead an exhilarating classroom discussion translates well to leading an online discussion. A common occurrence in computer conferencing is that the teacher poses a few questions to the group, and no one responds. Often, the conference becomes unused to the bewilderment of the teacher. Managing interaction in a distance learning environment requires different skills than in a traditional classroom (Inman & Kerwin, 1999).

It is widely assumed that students will use an online conferencing system just because it is available. This is not the case. The Apple Classroom of Tomorrow study put computers in schools for ten years as an exploratory experiment. Researchers believed that merely having technology available would increase learning. They were disappointed to find that it did not. Instead, they found that technology, by itself, does nothing. Rather than being a panacea, technology should be regarded as nothing more than a tool that has the potential to enhance innovative thinking (Sandholtz, Ringstaff, & Dwyer, 1997). It is the same with Internet based instruction.

Students often experience isolation due to the lack of the usual social aspects of a classroom (Ahern, 1995). The immediacy of interactions between instructor and student as well as among students is diminished because asynchronous communication can take days or even weeks between the time a question is asked or a point is made, and the student receiving feedback. This time lag can leave students feeling ignored (Eastmond, 1995). Attrition in distance learning courses is higher than their face-to-face counterparts, sometimes much higher (Carr, 2000; Cheng, Lehman, & Armstrong, 1991; Jewett, 1997; Noble, 1998). Studies report that completion rates of students in traditional face-to-face classes can be as high as 60% greater than online classes. This determined that the use of trained moderators did alleviate a number of these problems.

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Intent of the Study

The intent of the study was to explore how the use of a trained moderator affected both the students and instructor of an Internet based distance learning class. The moderator underwent training based on academic literature on educational computer conference moderation and examples taken from the experiences of online moderators.

Limitations of the Study

The limitations of this study were broad and affected the generalizability of its findings. The study involved one course given over one semester. The students involved were unique individuals each taking the course for different reasons. The woman that volunteered to be the trained moderator was under a set of pressures unique to her particular circumstance. The instructor utilized one form of Internet based distance learning that had strong similarities to a correspondence course. There are many other ways of constructing a distance learning course. The specificity of what transpired in the course had a strong bearing on the generalizability of the findings of the study. Qualitative research does not purport to generate universally generalizable findings, but rather to discover and uncover a set of observations, processes, and theories that other researchers can transfer to similar research problems in other situations and fields (Charmaz, 2000; Eisner, 1997).

Writing Myself In

In an interpretive study, such as this, all aspects of the study are filtered through the eyes of the researcher, which in this case was myself. Therefore, it has been common practice to make the interpretive process explicit (Bailey, 1996). Instead of seeming to be a neutral observer without bias, Piantanida and Garman (1999) suggested that it was incumbent upon the researcher to expose biases of the researcher by discussing why the study was personally compelling. Along with disclosure of the research process, personal disclosure helps the reader gain an understanding of my point of view and why certain decisions and interpretations were made. A discussion of what brought me to this work clarifies my point of view as it affected this study.

I have been online since the early 1980s when I bought my first computer, an Apple][+ along with a 300 baud modem. At first, what I found was not only disheartening, it was also boring. In northern New Jersey, the BBS world was inundated with vanity and inanity. Boards were mostly run by spoiled upper middle-class boys between the ages of 14 and 16 who used the venue to pump up their egos. The systems were rife with the collection and transfer of illegal MCI telephone card codes.

The idea occurred to me that a BBS could be a warm and friendly place, appealing to a different group of people than kids skirting the law. I developed the idea of a digital restaurant where people could visit and discuss the news of the day or anything else they had in mind, in a supportive, non-threatening environment. There would be no flames (personal attacks) nor would there be pirating of software. I felt that my bulletin board should reach out to the user, not the other way around, and attempt to be an oasis of intelligence in the suburbs. I bought some BBS software and learned how to twist and turn it into a restaurant named *+ DAVID'S PLACE +*.

When a user logged on, he or she was greeted at the door by a loquacious Maitre'd who profusely welcomed the new user. The user, who was referred to as a guest, was met with a description of the restaurant in paragraphs of purple prose that included everything from the pile of the carpet to the richness of the oak walls. The guest was then seated at a table and proffered the menu, which contained the options that were available for ordering. These, naturally enough, were the features of the BBS software. I was Chef David, who bounded out of the kitchen and again welcomed the guest. My persona was written into each prompt and instead of the usual unfriendly response of ? or SYNTAX ERROR, the software, when it did not understand a response would display something along the order of,

> I APOLOGIZE BUT THE BROWNIES JUST BURNED AND THE SMOKE FROM THE OVEN GOT IN MY EYES SO I COULDN'T MAKE OUT WHAT YOU WERE SAYING. WOULD YOU REPHRASE THAT?

I advertised the BBS on some other BBSs and waited for the phone to ring. I did not wait very long. In a matter of weeks, word somehow got out and I had to devote my Apple][+ to the BBS and buy myself a second computer because +* DAVID'S PLACE +* quickly became busy around the clock. A core group of guests were formed, and after being prompted a bit, engaged in discussions on a fairly high plane. The group quickly coalesced into a kind of round-table that did not easily suffer idiots.

I learned that telecommunication was a wonderful medium for building powers of persuasion, organization, and thought. I found that when one wrote a message it tended to be well composed because the process of thinking, typing, and reading turned people into editors who reflected on their thoughts before making them public. There was also an implicit standard of quality that was not taken lightly by the guests. My BBS gave people the opportunity to use telecommunication in a supportive and mentally stimulating atmosphere. Frequenting the BBS taught many people who previously were unfocused and disorganized in their writing, how to write and write well. Through the use of my BBS, I gave many people a reason to become interested in computers and who, years later, wound up with computer science degrees and jobs in the computer industry.

Finding ways to manage personal conflicts and heated arguments among guests did not come easily or naturally. I found myself experimenting with a combination of private email and publicly written messages to douse verbal flames, as some of the stronger, quicker, but painfully antisocial writers tried to rout other guests. This was my first taste of moderating online conferences, I went about it totally through trial and error. Although there were times I came close to just turning off the modem, I considered it a worthy challenge. The experience taught me about using language to manipulate. Manipulate is a charged word. According to the Merriam-Webster dictionary (1998) it can mean, "a): to manage or utilize skillfully" or "b) to control or play upon by artful, unfair, or insidious means esp. to one's own advantage" (p. 708). I preferred the former and used the word in that positive context in this study.

I decided to shut it down when it started to feel like more work than play and quickly found myself on the CompuServe Information Service's MAUG (Micronetted Apple User Group) forums. Eventually I became SysOp (System Operator) of the Macintosh Community Clubhouse Forum (MACCLUB). This forum was languishing and had nothing to recommend itself aside from being the place that housed the classified advertisements. It logged an average of seven or eight messages per day. I saw it as an opportunity to reincarnate *+ DAVID'S PLACE +* on a larger scale, so I restructured the forum by getting rid of the dusty ill used message topic sections and libraries and filled it with things that excited me and that I felt would excite the Macintosh community.

After a few weeks, an average day brought over 100 posted messages. After a few months a typical day brought 250 messages which, during periods of heat and passion, grew to over 500 postings daily. This was a very creative and exhilarating time for me. I quickly learned what worked and was quick to change anything that did not work. Under the basic rule, it was allowable to attack ideas posted in a message but it was not allowable to attack the person who wrote the message. This basic rule prevented many online flames but when a flame did occur, it took creativity and wit to quell it without resorting to banishing the offending writer from the community. No one was ever sent away. My 15 years of involvement online taught me much about what builds or destroys online communities.

I decided to rejoin academia and began to read the research on educational computer conferencing written over the same 15-year period. I was not surprised to find that most researchers had discovered exactly the same concepts through research that I had found through practicing my hobby. After returning to academia I soon realized that I did not have the time to devote to the community, so I ceased being its moderator.

Most people who have moderated online conferences learned by observing other moderators and then through the trial and error of doing it (Berge & Collins, 1998; Collins & Berge, 1997). At the start of my doctoral work, a vague and shapeless idea occurred to me that learning how to moderate by trial and error was very inefficient and that the skills of a moderator were something that could be taught. As I progressed through my program of study and learned more about distance learning in the context of Internet based delivery and computer conferencing my ideas clarified and resulted in this study.

Research Procedures

Qualitative Research

This study used a variety of qualitative analysis techniques to attempt to clarify a series of situations that, during data collection and analysis, widened in scope and complexity as new issues arose and became integral to the story. Miles and Huberman (1994) maintained that qualitative research is more of a craft than a set of rules and that no study conforms perfectly to a predetermined methodology. Any methods that afford clear and "credible meaning from a set of qualitative data is grist for our mill regardless of its antecedents" (p. 3).

Attempting to define qualitative research is a bit like trying to describe smoke. It seems easier to explain what it is not than what it is. According to Savenye and Robinson (1996) it is marked by rich and detailed descriptions of the behaviors of people who, in their actions, construct their own realities that influence the meaning of their actions. It questions just what is going on and what variations can be found in the phenomenon being examined (Lofland, 1971).

Participants and Conference

The students were 30 upper level undergraduates enrolled in ICJ-450, Implications of Supreme Court Decisions on Law Enforcement at a large Southwestern University. The gender distribution of the class was 21 women and 9 men. I decided to break the class into three conferences that were called law firms due to the context of the subject matter. Each conference was restricted to reading and responding to messages within the particular conference assigned to the student. The initial design called for one conference to be lead for the entire semester, by a moderator who would undergo training consisting of both face-to-face training and a written job aid of my design For the other two conferences, one student each week would be assigned the job of moderating. Due to the Instructor failing to communicate with students regarding moderating the two conferences without a trained moderator, most weeks, any moderating activities in these conferences was ad-hoc. The class used the FirstClass conferencing system.

Structure of the Course

The way that Stanley Pike, the Instructor, structured the course was not very conducive to interaction. Each week the students were required to read a number of supreme court decisions, answer questions about them and send the results back to the Pike who would send a one line email detailing it the work was sufficient or needed to be redone. There was no student-student interaction built into the course and the student-teacher interaction was quite minimal. The course was conducted via distance once before I got involved and the conferencing, although there was presented as something for the students to use if they chose. The messages may or may not be read by Stanley. The result was a total of four messages written over the entire semester from a class of approximately 30 students.

Data Collection

Data were collected from 763 online messages, which were written by the members of the three segregated computer conferences. My role was that of an observer. Throughout the study I wrote detailed memos explaining the process and my perspectives on what had transpired. Detailed coding memos were also written as the data were analyzed. Data were also provided by email and phone conversations between myself and the trained moderator; Rob Janesh from the College of Distributed Education; Barbara Malik, the technology support analyst from the School of Legal Services; and Stanley Pike, JD, the instructor of the course. After the end of the course I conducted audio taped interviews with each of these people; the transcription of the tapes added to the data. Near the end of the course, an online survey was completed by 22 of the 30 students who finished the course.

Data Analysis

I used a combination of grounded theory and narrative analysis to interpret and describe the data. The thrust of grounded theory is toward developing theory without regard to the type of data, or lines of research, which makes it not a method or technique, per se. Instead, it is a "style" of engaging in qualitative research that includes a number of distinct features and guidelines, such as using constant comparisons and a paradigm of coding to ensure the development of concepts (Strauss, 1987). In assessing a grounded theory, the research process must be explicated and conform to the rather broad requirements of the constant comparative method such as engaging in comparisons between data as soon as data is collected. For the study to be considered adequate, the resulting theory should fit the phenomenon studied and be general enough to broadly cover a range of situations (Wells, 1995).

Although grounded theory began as a postpositivist mode of inquiry, when it is subjective and relativist, grounded theory can evolve to fit a constructivist perspective (Annells, 1996). Charmaz (2000) proposed a constructivist approach to grounded theory that does not attempt to find truth that can be generalized, instead its use is to generate concepts that can be transported to similar problems in other fields. An interpretivist mode of grounded theory was used in this study. To assist me the in massive task of analyzing 763 text messages posted to the computer conferences, I coded useing the software program QSR NUD*IST. The acronym stands for Non-numerical Unstructured Data Indexing Searching and Theorizing (Qualitative Solutions and Research Pty Ltd., 1997). NUD*IST is a program designed for the flexible storage, coding, retrieval, and analysis of text. Weitzman and Miles (1995) declared that it is one of the best software options available. They contend that the developers did a masterful job of determining and providing for the actions and features required for a wide variety of text analyses. After a sizable number of iterations of coding one major criteria emerged: 'What built or destroyed community'.

Narrative research refers to any study that analyzes narrative materials (Lieblich, Tuval-Mashiach, & Zilber, 1998). It is a form of qualitative analysis using plot and stories to describe events and situations and has a variety of meanings and procedures dealing with how protagonists interpret things (Bruner, 1990; Riessman, 1993).

Polkinghorne (1995) divided narrative research into two classes: paradigmatic and narrative construction. Narrative construction is not merely a retelling of the actions and thoughts of the protagonist; it attempts to bring meaning and significance to them. The researcher, in this form of narrative inquiry, is the narrator who tells the story in his or her own voice. The paradigmatic type of narrative research produces knowledge of concepts that classify instances to categories with shared common attributes. Paradigmatic narrative research has apparent similarities to grounded theory. Often referred to as analysis of narrative, the researcher inspects a number of stories to discover connections and similarities between them.

The presentation of analysis of narrative often takes the form of extended quotations from unedited data, along with the stories leading up to the data, and attempts to analyze what took place through the perspectives of the commonality emergent from the data under study and varied other data. This study uses both types of narrative.

Struggling Toward the Firms

The course almost didn't get offered due to serious medical problems experienced by the Instructor which prevented any preparation or moderator training before the first day of class. A grad student that I was promised to take on the role of the moderator dropped out and I was left with trying to convince a student to take on the daunting task of moderating. Mimi Denomme did volunteer but a month passed before the training could take place due to her out of class responsbilities. She had three small children, a full time job and was taking three other classes. This gave her next to no time for moderating. I was quite frustrated and disappointed with the amount of time and effort that Mimi devoted to moderating, but I certainly understood the underlying reasons for this lack of participation.

Stanley Pike was not sold on the idea of interaction being a long time lecturer who easily fell into the correspondence course model of distance leaning. He neither received or solicited any training in the differences between a face-to-face course and one conducted at a distance. Stanley felt that he had put enough time into the course by being required to send short emails.

It was a full month after the start of the course before the conferences started, and two weeks after that that I convinced Stanley that a participation requirement was a critical component of conferencing. Hacker and Wignall (1997) observed that participation of students with low degrees of computer experience declined significantly over time. Therefore, a minimum level of participation should be mandated at the start of the conference. This can be accomplished either by establishing a written or verbal contract between the moderator or teacher and the students (Rohfeld & Hiemstra, 1995). Eastmond and Ziegahn (1995) maintained that along with mandating a certain number of messages per week, that there be standards established for the quality and relevance of the messages. They suggested that participation accounted for 30% of the course grade. It has also been proposed that the amount and quality of participation should be able to raise or lower assessment by a full letter grade (Cifuentes, Murphy, Segur, & Kodali, 1997). Many conferences take time to get established and spark general interest to the extent that the members need no incentive to post messages; therefore, it is important to establish a mandate to give the conference time to come into its own.

Results

Mimi tried her hand at welcome messages for each of the three-conferencing spaces within her conference (Firm two). I decided that three spaces made sense from an organizational perspective and to eliminate confusion on where to post. What was developed was The Coffee Shop, a social space, The Board Room, a content oriented space and The Tech Room, a place for technical problem solving. Each of the other two groups only had one group space.

I gave Mimi feedback on my feelings on what would work and provoke discussion and what wouldn't. Soon we agreed upon three messages that would suffice.

The number of messages posted per week shed some light on the scope of the firms and serves a point of reference and departure.

Figure 1. Total postings per week in each firm

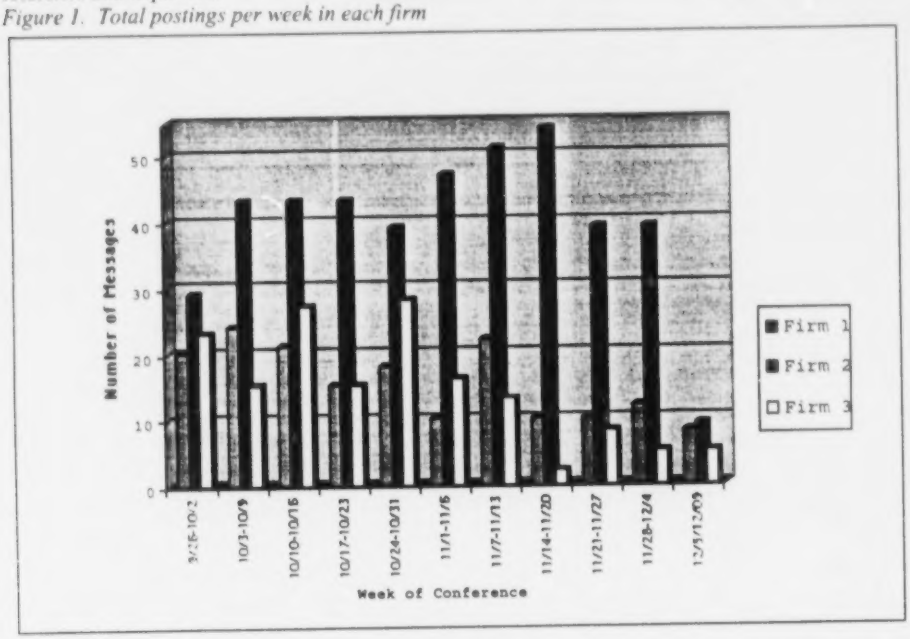
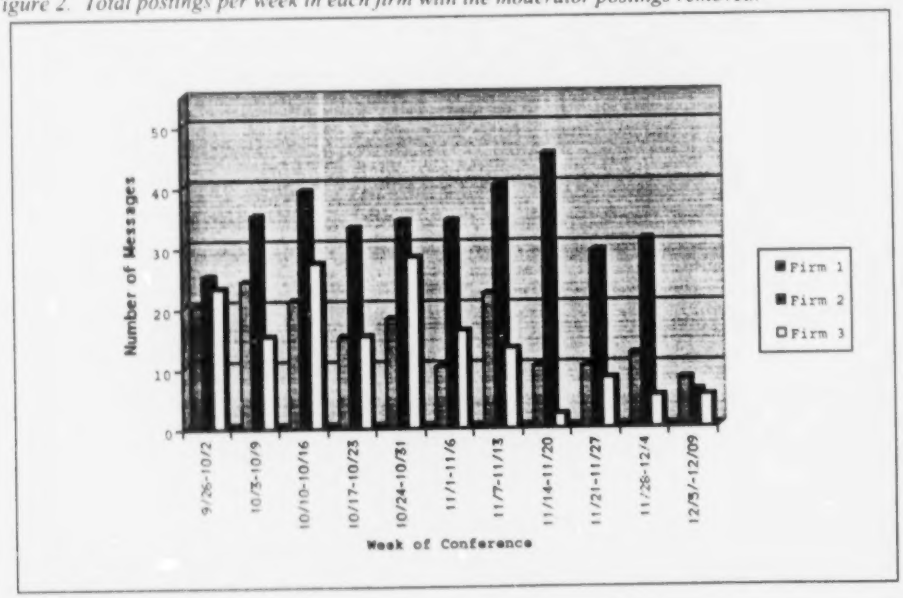


Figure one shows many more messages being posted in group two (the group with a trained moderator than the other two groups, but one might easily see a flaw in this by positing that the majority of messages were written by the moderator.

Figure 2. Total postings per week in each firm with the moderator postings removed.



Subtracting the firm 2 moderator messages from total messages still shows many more messages posted to firms two than in the other two firms. What happened in the firms to make such a difference?

Firm One

At the start of data collection, firm 1 demonstrated no particular leadership. Messages were concerned with organizational issues such as questions dealing with due dates for assignments and questions regarding grading procedures. A number of people were confused regarding what was expected of them and how to find Supreme Court cases required for homework. There was one thread that went on for a number of weeks, soliciting employees for a security firm. This thread upped the message count considerably. Overall, there was no focus to this firm in the first few weeks. The threads were mostly concerned with asking single questions and receiving single answers. There was quite a bit of talk about how much harder the course was than what was expected, which also became a major concern in other firms.

Within a few weeks the firm evidenced a strong sense of pointlessness of participating in the discussions whether it was for credit or not. Since the firm was not in any way integrated into the class, the majority of participants considered it a waste of time and by the end of the course, the people who did participate, and that number dropped every week, were posting messages without any content just because it was a requirement.

> DO NOT WASTE YOUR TIME READING THIS!! I'm just sending an email to fulfill the three-a-week requirement. Unfortunately I have nothing to say or ask, so I am writing about my writing about nothing.

Soon thereafter, most message traffic from Firm one stopped due to no purpose, no leadership and no momentum.

Community was not built in firm one since the participants never found a center or any salient reason to be there at all. It was generally considered a waste of their time.

Firm Three

During the first week of messaging Karla Schwartz asserted leadership of group. Karla had a strong personality and quickly fomented discontent with the amount of homework that the class was responsible to accomplish each week. Although the group had no indication that the Instructor was not reading the messages Karla started a thread entitled 'Dr. Pike is Insane', making the point that the workload is totally unreasonable. This is a part of a representative message from Karla:

> I am sorry but I must vent again. I am absolutely sick of this sh*t. I have answered 18 questions and I still have like 15 to go. This is absolutely ridiculous and I am SICK OF IT! This class is taking up my whole goddamn life and I do nothing but work and come home and work on this sh*t.

This created a mob mentality where everyone seemed to jump on the 'bandwagon' and state that they also weren't going to take it. The class decided to distribute answers to their take home midterms and discussed emailing each other long homework assignments where they intended to change the wording so it wouldn't appear as plagiarism. These messages were posted in public forums demonstrating uninhibited behavior that many researchers have noted as being a inherent in asynchronous communication.

Eventually the workload was decreased and message traffic lessened to the point of being nearly non-existent. Since there was nothing left to complain about, they had nothing to say.

Community was built in firm three, but not the sort proposed by advocates of online learning. What built this community was group dissent and communal complaints lead by Karla Schwartz and fomented by the members of the firm that posted messages. During the week of the midterm eight people posted, followed by seven people just before Dr. Pike changed the assignments. Once the change was made only four people posted. Once there was nothing left to rally around, everyone seemingly packed up and went home. There was nothing left to talk about.

Firm Two

The amount of intervention by the moderator was much less than what I, at first considered adequate, the conference started quite late into the course the conference was generally well received and an enjoyable and helpful addition to the class. An interesting side-note is that in interviewing the Instructor, his opinion was that the conferencing had nothing to do with the class, most of the attitude surveys from members of Firms two stated that the messaging was well integrated into the class.

Community was built in firm two. There was a heavy social use of The Coffee Shop section that the firm used to connect and form relationships. There was a large amount of personal information revealed as an ongoing

system of empathy and warmth was developed. What built the community was the construction of a warm and friendly atmosphere prompted by Mimi, and the camaraderie that grew out of what became a place to come for support friendship and humor.

Summary

This study attempted to explore the effects of a trained moderator in an asynchronous distance learning class. The study was designed to use grounded theory and narrative research to report on the experiences of a graduate assistant expected to be trained as a moderator, and the members of the computer conference managed by the moderator. These experiences were to be compared with the experiences of two other segregated computer conferences, each run by a moderator that would change each week. These moderators would receive no formal training of any sort. The computer conferences were to support a distance learning course offered by the School of Legal Services at a campus of a large southwestern university.

The study almost did not take place due to a litany of problems, including the graduate assistant meant to undergo the moderator training dropping out, the instructor experiencing life-threatening medical problems, and a course that was previously devoid of any form of interaction among the students. The instructor, a long time lecturer, had no distance learning training and the resulting class resembled an electronic correspondence course with little regard given to student-student interaction.

A student volunteered to undergo training and moderate one of three-segregated computer conferences for the semester. Time pressures and other commitments prevented her from practicing a number of the techniques of good conference moderation. It became necessary for me to be in constant contact with the moderator, heavily guiding her actions until late into the semester. The other two-segregated computer conferences did not employ moderators due to technical complications.

The study found that even with a low degree of intervention the use of moderation techniques allowed the moderated group to form a community based on camaraderie, support, and warmth. Conference messages in this group amounted to over 2.5 times that of the next highest group. It was also found that structuring places to post messages by dividing the conference into a content oriented space, a social space, and a technical space had positive implications, which assisted and at times became a substitute for certain moderation techniques.

Analysis of the other two groups found one group forming no community whatsoever and the other group forming a community based upon group dissent and communal complaint initiated by a strong personality and what the group considered an inordinate amount of work. This group demonstrated extremely uninhibited behavior using words and concepts that would be inappropriate in a classroom situation.

In a discussion of how online courses are constructed on the campus under study, it was discovered that there was a wide variety of overlapping options that could easily become confusing. Major emphasis was given to putting courses online while little thought was given to the appropriateness of the pedagogy that should be employed.

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